

**GDAAC Notes for  
MODIS Technical Team Meeting (02/26/98)**

**ECS-SYSTEM**

**STATUS: GREEN**

- Current Drop is 3.02.02
- Workaround for Ingest subsystem tested successfully with simulated MODIS L0 data.

**ECS-SSIT**

**SSIT STATUS: GREEN**

- Verification of Drop 3.02 pending completion of PGE-ESDT matchup tested in Integration II. PGE 7,8,11 are candidates for this test.

**MAPI**

**SSIT STATUS: YELLOW**

Problem: Error list documentation (see PGE01 description)

- Delivered (2/11/98);
- Directory structure problem resolved (2/17/98).
- Inspection complete (2/19/98).
- > Installation and build verification complete (2/24/98).

**SDST TK**

**SSIT STATUS: RED**

Problems: Examples did not build and run correctly at DAAC; Patch for PCF, Log files and comparison files pending (Red)

Error list documentation (see PGE01 description) (Yellow)

- Delivered (2/11/98); Inspection completed (2/17/98).
- > Redelivery of PCF, Log files and comparison files needed to complete toolkit build and installation verification (2/24/98).

**PGE01**

**SSIT STATUS: RED**

Problem: SDST Toolkit needed to build and run PGE01. (Red)

The metadata files created by PGE01 do not match the ESDTs baselined in Release B. The data server relies on the metadata files to know how to insert products into its archive; at present, the data server will not be able to archive the output products created by PGE01 due to this discrepancy. Integration II cannot complete until this is resolved. (2/17/98 - Red)

DAAC cannot promote PGE to operations without error list documentation, lien pending; resolution schedule pending SDST communication with algorithm developers.(Yellow)

- Delivered (2/6/98); Inspection completed (2/9/98)
- > Patch pending from SDST to address metadata discrepancy (2/13/98).
- > Directory structure problem resolved (2/17/98).
- > Integration I pending build and checkout of SDST Toolkit (2/24/98).
- DAAC is providing (0.75 FTE) to assist with PGE01 functionality and optimization at SDST's request

**PGE02**

**SSIT STATUS: RED**

Problem: Metadata discrepancy between PGE and ESDT (see PGE01 description). (Red)

Error list documentation (see PGE01 description). (Yellow)

- Delivered (1/29/98); Inspection completed (2/2/98); Integration I completed (2/4/98)
- > Integration II on hold pending patch to address metadata discrepancy (2/17/98)

**PGE03**

**SSIT STATUS: RED**

Problem: Run time errors encountered; test analysis underway

--> Delivered (2/18/98); Inspection completed (2/20/98)

## **PGE07**

**SSIT STATUS: YELLOW**

Problem: Error list documentation (see PGE01 description) (Yellow)

- Delivered (12/5/97); Inspection completed (12/8/97); Integration I completed (12/13/97)
- PGE patch requested (12/17/97); patch delivered (1/20/98); regression testing completed (1/26/98)
- Integration II pending verification of Drop 3.02

## **PGE11**

**SSIT STATUS: GREEN**

- Delivered (1/7/98); Inspection completed (1/15/98); Integration I completed (1/16/98)
- Integration II pending patch from developer and verification of Drop 3.02
- Patch delivered (2/4/98); Installation and regression testing completed (2/6/98)
- > Patch applied, regression testing in progress (2/25/98)
- > DAAC provided feedback on error list documentation (2/24/98).

## **PGE08**

**SSIT STATUS: YELLOW**

Problem: Error list documentation (see PGE01 description) (Yellow)

- Delivered (1/13/98); Inspection completed (1/15/98); Integration I completed 1/21/98
- Integration II pending verification of Drop 3.02.

## **V2 SSIT AGREEMENT**

**IN PROGRESS SINCE 9/97**

- Baseline agreement pending SDST feedback of 1/9/98
- PGEs delivered prior to mutually baselined agreement or non-compliant with agreement may require remedial work at the DAAC
- DAAC made final baseline modifications based on discussions with SDST; document provided to SDST 1/30/98 for sign-off; signatures pending.
- DAAC working to current Agreement as *de facto* baseline. (1/30/98)
- SDST to provide DAAC with list of outstanding issues; DAAC to attempt final issue resolution (2/18/98).
- > SDST provided DAAC with list of outstanding issues, DAAC to provide feedback and revised version of baselined document (2/25/98).

## **GDAAC/MODIS OPERATIONS AGREEMENT**

- GDAAC developed draft, circulated for internal edits; edits being made by Stuart Frye. Stuart will be the active Point of Contact for revisions to the document until it is signed. Draft due to MODIS & GDAAC for comment by 2/27/98.

## **GDAAC/MODIS SCIENCE AGREEMENT**

- Need for this document was identified within the GDAAC while drafting the GDAAC/MODIS OA; this document will detail the working agreements between the GDAAC MODIS Data Support Team and the MODIS Science Team, including SDST. These interactions include QA metadata updates and interactions regarding fixes for failed PGEs, among others. An outline is being drafted by Stuart Frye; will be circulated for comment to MODIS & GDAAC 2/20/98.

## **CONCERNS:**

- > Prioritization of current activities; core PGEs require fixes to complete testing while DAPS for non-critical PGEs are being delivered. Recommendation: SDST should give highest priority to getting core PGEs successfully tested. If necessary, defer delivery of non-critical PGEs.
- PGE01 (V2.1) needed by 4/1/98 to complete SSIT and available for system certification tests. Delivery at cutoff date allows little or no room for error to prepare for system certification tests. Problems encountered with V2.1 may require use of V2.0 in certification testing.
- Maximum number of PGEs DAAC can test is 3 until SSIT staff is fully trained. SSIT staff should be fully trained by 3/31/98.

**Number of SSI&T problems reported to date.**

	Number of Deliveries/ Patches	Date Completed	Cat. 1 open	Cat. 1 closed	Cat. 2 open	Cat. 2 closed	Cat. 3 open	Cat. 3 closed
PGE08	1	1/13/98						
Inspection		1/15/98		2		1	2	2
Integration I		1/21/98	1				1	
Integration II								
PGE07	1	12/5/97						
Inspection		12/8/97		5		3	1	
Integration I	1	1/27/98				2	1	3
Integration II								
PGE11	1	1/7/98						
Inspection		1/15/98		5	2	1	1	1
Integration I	2	2/24/98		1	1	1	1	
Integration II								
PGE02	1	1/29/98						
Inspection	1	2/2/98		3			3	4
Integration I		2/4/98					1	
Integration II			1					
PGE01	1	2/6/98						
Inspection		2/8/98			2			
Integration I								
Integration II							3 (v1)	1 (v1)
PGE03	1	2/18/98						
Inspection		2/20/98	1	2	3		2	
Integration I			1				1	
Integration II								
MAPI	3	2/11/98						
Inspection		2/19/98		4	2		5	
DAACbuild				2	1	1	2	1
SDSTTK	2	2/11/98						
Inspection		2/17/98		8	1		3	
DAACbuild								2
MODIS setup	1	ongoing						
Inspection								
Integration I					2			
Integration II								

**BACKGROUND**

**PGEs into System Certification Tests**

Best Case: 01, 02, 03, 07, 08, 11

Nominal Case: 01, 02

Worst Case: L0 data ingest

Work days for SSIT	Best Case	Nominal Case
Inspection	1	3

Integration I	2	5
Integration II	4 (est)	8 (est)
Patch	1-4	3-8
Error Testing	4	8
Chain Testing	10	15

Best Case: Little or no problems with PGE

Nominal Case: Minor problems encountered and resolved; no major blunders

#### SSIT Status Codes:

**Complete** PGE is ready to process data at launch in validation mode or ops mode

**Green** No problems or Category 1 fixes only; either no liens on PGE or liens worked post-launch

**Yellow** Problems in test; Category 2 or 3 fix pending; liens placed on PGE with workoff schedule; liens worked off by launch

**Red** SSIT has stopped; PGE will not run in its current form; fix required before testing can continue

#### Categories of PGE fixes at the DAAC:

**Category 1:** GDAAC SSIT staff fix the problem in the DAAC baseline, report action to SDST and continue testing.

**Category 2:** SDST directs GDAAC SSIT staff, possibly based upon GDAAC recommendation, to fix the problem in the DAAC baseline and continue testing.

**Category 3:** GDAAC SSIT staff provides Baselined Algorithm Package to SDST to port back to TLCF for bug fixes and possible retesting. SDST then makes redelivery to DAAC.

#### Phases of SSI&T:

**Inspection:** Delivered Algorithm Package is inspected for contents and completeness. PGE is inspected for documentation, formats, file structures, and standards compliance.

**Integration-I:** PGE is built and run from the command line. Generated data product(s) are verified with SDST supplied comparison file(s). (DAACbuild for a library)

**Integration-II:** PGE is registered into ECS, including population of PDPS database. Test data is inserted into the Data Server for staging into production. PGE execution is planned and scheduled through ECS PDPS utilizing Autosys scheduler. Generated product(s) inserted into Data Server. Generated data product is retrieved from Data Server for verification.

**Note:** Drop 3 is our target for full SSIT as this will include a database schema change and include updated ESDTs. The ESDTs and related files (MCFs) associated with these PGEs integrated into Drop 3 should not change from integration through launch.